



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,956	10/29/2003	Bernhard Spiegl	66374-145-7	6151
25269	7590	07/01/2005	EXAMINER	
DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005			NOLAND, THOMAS	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/694,956	Applicant(s) SPIEGL ET AL.	
	Examiner Thomas P. Noland	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02122004</u> . | 6) <input type="checkbox"/> Other: _____ |

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 7 "the face" should be -- face --. In claim 2, line 3 the piston axis (25) should be -- a central longitudinal axis (25) of the piston --. In lines 5-6 " the sensor element " should be - -a sensor element --. In claim 3, line 2, there is no antecedent for plural elements. Also not in claim 5, line 5 and claim 6, line 2. In claim 4, line 3 "the lateral distance (a) "should be --- a lateral distance -- because of lack of antecedent and because the character (a) has been previously used to designate the lateral space. For

consistency and accuracy the term "space" in claim 1, lines 9 and 11 should therefore be replaced with --- spacing -- or -- distance -- and the same terminology used in claim 4, line 3 and claim 13, line 2. It is unclear how to distinguish between "two sensor elements (16) -- which one preferably designed as eddy current sensor --" and those that are not preferably so designed. Other phrases using preferable limitations such as in claim 5, lines 2-4, and claim 7, lines 3-4 and claims 11, line 4 are also similarly unclear. In claim 6, line 3 and in claim 7, lines 6-7 "the cylinder head (7)" should be --- a head (7) of the cylinder --. In claim 4, lines 2-3 and claim 7, line 2 "the face" should be --- a face --. In claim 8, line 4 "the an" should apparently be -- an --. There is no proper antecedent for plural sensor element (s) in line 6. It is unclear what is meant by "standard" in line 7. In claim 9, line 5 "the connecting line" should be --- a connecting line ---. It is unclear whether "the surface oriented toward the sensor element" in lines 5-6 is different than the flat surface. If it is the phrase in lines 5-6 lacks antecedent. If the same it should be made more clear. It is unclear how the pickup element can be both open and sealed toward the cylinder chamber in claims 10, lines 3-4. It is unclear what is meant by "as thin as a diaphragm" in line 6 since diaphragms vary in thickness. In line 9 "the area" should be --- an area --. In claim 7, line 7 after "as" -- an -- should be inserted. There is no proper antecedent for the lateral orientation implied by the phrase the measuring cartridge (15) that is oriented laterally" in lines 8-9. In claim 11, line 2 having the sensor element be an eddy current sensor should be more positively recited. In line 3 "its diaphragm-like section (8) should be replaced with --- a

diaphragm-like section (8) thereof ---. Claim 12 is unclear because there was no antecedent from claim 10 for the sensor element (16) to be in the pickup element (17) as in lines 1-2. In claim 13, line 6 "the rider" should be --- rider ---. In line 3 "control" should be deleted. In line 5 after "as" - - a - - should be inserted. It is also unclear how claim 13 further limits the subject matter of claim 1.

4. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 appears only to indicate that the apparatus can be used to monitor wear. It includes no additional apparatus limitations.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Blubaugh et al US 2002/0074994.

Note especially the abstract, drawings and paragraph 23. Electronics module 48 could be considered to be an adapter/cartridge.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blubaugh et al in view of Rouam US 4,143,319.

Blubaugh et al does not disclose that his monitor could be used to monitor wear of piston rings but such would have been an obvious use in view of the known desire, and the known use of a similar monitor, to monitor such wear by Rauam. Note abstract and fig. 1 therein.

7. Claims 2-5 and 8-12, as best understood, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show piston position monitors.

9. Wohner US 2005/000772, not prior art, discloses a piston position sensor but does not claim the use of a sealed sensor and other elements as claimed herein.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Noland whose telephone number is (571) 272-2202. The examiner can normally be reached on weekdays from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached on (571) 272-2208.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2800 Customer Service at (571) 272-2815.

Thomas P. Noland
Primary Examiner
Art Unit 2856

Noland/ds

06/24/05

Thomas P. Noland
6/28/05